

10/521,508 YONG CHU 04-03-2006

\$%^STN;HighlightOn=;HighlightOff=;

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssptaylc1626

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 "Ask CAS" for self-help around the clock
NEWS 3 DEC 21 IPC search and display fields enhanced in CA/CAPLUS with the
IPC reform
NEWS 4 DEC 23 New IPC8 SEARCH, DISPLAY, and SELECT fields in USPATFULL/
USPAT2
NEWS 5 JAN 13 IPC 8 searching in IFIPAT, IFIUDb, and IFICDB
NEWS 6 JAN 13 New IPC 8 SEARCH, DISPLAY, and SELECT enhancements added to
INPADOC
NEWS 7 JAN 17 Pre-1988 INPI data added to MARPAT
NEWS 8 JAN 17 IPC 8 in the WPI family of databases including WPIFV
NEWS 9 JAN 30 Saved answer limit increased
NEWS 10 JAN 31 Monthly current-awareness alert (SDI) frequency
added to TULSA
NEWS 11 FEB 21 STN AnaVist, Version 1.1, lets you share your STN AnaVist
visualization results
NEWS 12 FEB 22 Status of current WO (PCT) information on STN
NEWS 13 FEB 22 The IPC thesaurus added to additional patent databases on STN
NEWS 14 FEB 22 Updates in EPFULL; IPC 8 enhancements added
NEWS 15 FEB 27 New STN AnaVist pricing effective March 1, 2006
NEWS 16 FEB 28 MEDLINE/LMEDLINE reload improves functionality
NEWS 17 FEB 28 TOXCENTER reloaded with enhancements
NEWS 18 FEB 28 REGISTRY/ZREGISTRY enhanced with more experimental spectral
property data
NEWS 19 MAR 01 INSPEC reloaded and enhanced
NEWS 20 MAR 03 Updates in PATDPA; addition of IPC 8 data without attributes
NEWS 21 MAR 08 X.25 communication option no longer available after June 2006
NEWS 22 MAR 22 EMBASE is now updated on a daily basis
NEWS 23 APR 03 New IPC 8 fields and IPC thesaurus added to PATDPAFULL
NEWS 24 APR 03 Bibliographic data updates resume; new IPC 8 fields and IPC
thesaurus added in PCTFULL

NEWS EXPRESS FEBRUARY 15 CURRENT VERSION FOR WINDOWS IS V8.01a,
CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 19 DECEMBER 2005.
V8.0 AND V8.01 USERS CAN OBTAIN THE UPGRADE TO V8.01a AT
<http://download.cas.org/express/v8.0-Discover/>

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items

Enter NEWS followed by the item number or name to see news on that
specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 15:19:28 ON 03 APR 2006

=>

Uploading

THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE

Do you want to switch to the Registry File?

Choice (Y/n):

Switching to the Registry File...

Some commands only work in certain files. For example, the EXPAND command can only be used to look at the index in a file which has an index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of commands which can be used in this file.

=> FILE REGISTRY

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

1.89

1.89

FILE 'REGISTRY' ENTERED AT 15:24:51 ON 03 APR 2006

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2006 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 2 APR 2006 HIGHEST RN 878996-50-0

DICTIONARY FILE UPDATES: 2 APR 2006 HIGHEST RN 878996-50-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*

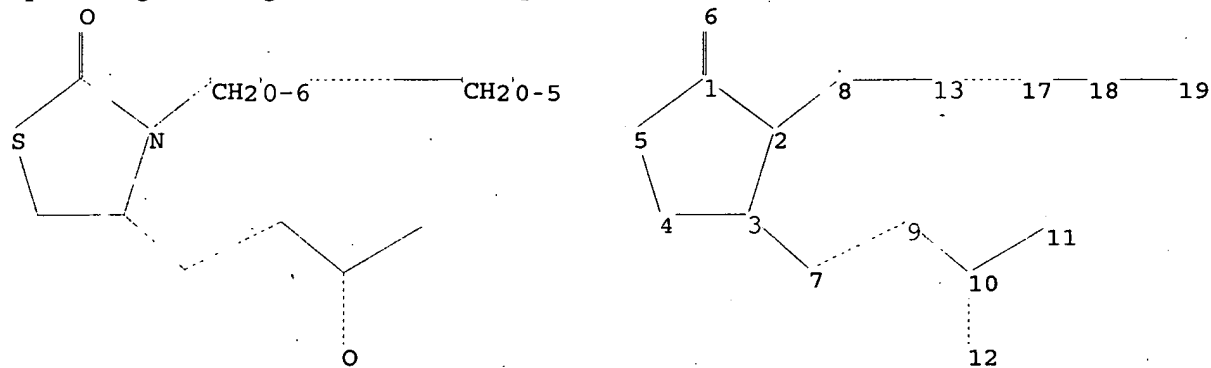
Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10521508\10521508c.str



chain nodes :

6 7 8 9 10 11 12 13 17 18 19

ring nodes :

1 2 3 4 5

chain bonds :

1-6 2-8 3-7 7-9 8-13 9-10 10-11 10-12 13-17 17-18 18-19

ring bonds :

1-2 1-5 2-3 3-4 4-5

exact/norm bonds :

1-2 1-5 1-6 2-3 3-4 4-5 7-9 10-12 13-17

exact bonds :

2-8 3-7 8-13 9-10 10-11 17-18 18-19

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:CLASS 7:CLASS 8:CLASS 9:CLASS
10:CLASS 11:CLASS 12:CLASS 13:CLASS 17:CLASS 18:CLASS 19:CLASS

L1 \STRUCTURE UPLOADED

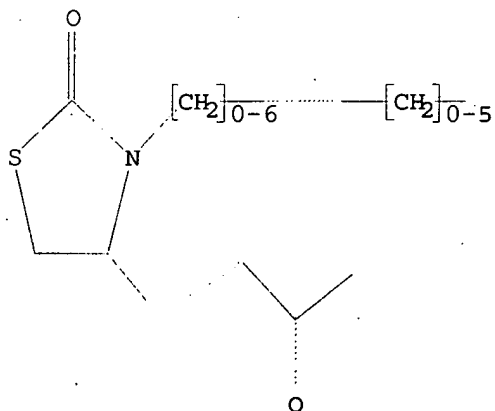
=> s

ENTER LOGIC EXPRESSION, QUERY NAME, OR (END):end
SEARCH ENDED BY USER

=> d

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 15:25:32 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 4 TO ITERATE

100.0% PROCESSED 4 ITERATIONS 2 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 4 TO 200
PROJECTED ANSWERS: 2 TO 124

L2 2 SEA SSS SAM L1

=> s l1 full

FULL SEARCH INITIATED 15:25:45 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 85 TO ITERATE

100.0% PROCESSED 85 ITERATIONS 54 ANSWERS
SEARCH TIME: 00.00.01

L3 54 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	167.38	169.27

FILE 'CAPLUS' ENTERED AT 15:26:00 ON 03 APR 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 3 Apr 2006 VOL 144 ISS 15
FILE LAST UPDATED: 2 Apr 2006 (20060402/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s l3

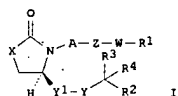
L4 3 L3

=> d ibib abs hitstr tot

L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:203664 CAPLUS
DOCUMENT NUMBER: 140:253553
TITLE: Preparation of oxazolidin-2-one and thiazolidin-2-one derivatives for use as prostaglandin E2 receptor EP4-subtype agonists
INVENTOR(S): Han, Yongkin; Colucci, John; Billot, Xavier; Wilson, Marie-Claire; Young, Robert
PATENT ASSIGNEE(S): Merck Frost Canada & Co., Can.
SOURCE: PCT Int. Appl., 66 pp.
CODEN: PIXKD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

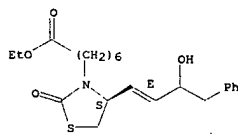
PATENT NO. KIND DATE APPLICATION NO. DATE
WO 2004019938 A1 20040311 WO 2003-CA1306 20030825
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, VC, VN, YU, ZA, ZM, ZW
RW: GH, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, BG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
CA 2495917 AA 20040311 CA 2003-2495917 20030825
AU 2003258433 A1 20040319 AU 2003-258433 20030825
EP 1545517 A1 20050629 EP 2003-790594 20030825
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
JP 2006504679 T2 20060209 JP 2004-531332 20030825
PRIORITY APPL. INFO.: US 2002-406530P P 20020828
WO 2003-CA1306 W 20030825

OTHER SOURCE(S): MARPAT 140:253553
GI



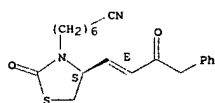
AB This invention relates to compds. of formula (I) [X = O, S; Y = CH2CH2, CH:CH, cyclopropane-1,2-diyl; Y = CO, CH(OH); A, W = a bond, C1-6 alkylene optionally substituted with 1, 2, 3, or 4 halogen atoms; Z = O, S, cyclopropane-1,2-diyl, CH2, HC=H, C≡C, bond, C, each disubstituted aryl or heteroaryl ring; R2 = C1-6 alkyl, provided that R2 is not n-pentyl,

L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



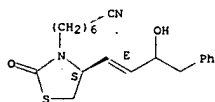
RN 670220-30-1 CAPLUS
CN 3-Thiazolidineheptanenitrile, 2-oxo-4-[(1E)-3-oxo-4-phenyl-1-butenyl]-, (4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 670220-31-2 CAPLUS
CN 3-Thiazolidineheptanenitrile, 4-[(1E)-3-hydroxy-4-phenyl-1-butenyl]-2-oxo-, (4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



IT 670219-01-9P, 7-[4-[(1E)-4,4-Difluoro-3-hydroxy-4-phenylbut-1-enyl]-2-oxo-1,3-thiazolidin-3-yl]heptanoic acid 670219-02-0P, 7-[4-[(1E)-3-Hydroxy-4-phenylbut-1-enyl]-2-oxo-1,3-thiazolidin-3-yl]heptanoic acid 670219-03-1P, 4-[(1E)-4,4-Difluoro-3-hydroxy-4-phenylbut-1-enyl]-3-[6-(1H-tetrazol-5-yl)hexyl]-1,3-thiazolidin-2-one 670219-04-2P, 4-[(1E)-3-Hydroxy-4-phenylbut-1-enyl]-3-[6-(1H-tetrazol-5-yl)hexyl]-1,3-thiazolidin-2-one 670219-06-4P,

4-(3-Hydroxy-4-phenylbutyl)-3-[6-(1H-tetrazol-5-yl)hexyl]-1,3-thiazolidin-2-one 670219-07-5P, 4-(4,4-Difluoro-3-hydroxy-4-phenylbutyl)-3-[6-(1H-tetrazol-5-yl)hexyl]-1,3-thiazolidin-2-one 670219-08-6P,

7-[4-[(1E)-4,4-Difluoro-3-hydroxy-4-(3-(methoxymethyl)phenyl)but-1-enyl]-2-oxo-1,3-thiazolidin-3-yl]heptanoic acid 670219-09-7P,

4-[(1E)-4,4-Difluoro-3-hydroxy-4-(3-(methoxymethyl)phenyl)but-1-enyl]-3-[6-

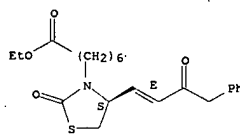
L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
(CH2)0-8-C6-10 aryl, (CH2)0-8-C5-10 heteroaryl, (CH2)0-8-C3-10 heterocycloalkyl, (CH2)0-8-C3-8cycloalkyl, O-C1-10-alkyl, O-C6-10aryl, O-C5-10heteroaryl, O-C5-10heterocycloalkyl, O-C3-10cycloalkyl wherein aryl, heteroaryl, heterocycloalkyl, and cycloalkyl are optionally substituted; R3, R4 = H, halogen, C1-6 alkyl; or R3 and R4, together with the carbon atom to which they are attached, form a C3-7 cycloalkyl ring; R5 = H, OH, CH2OH, C1-6 alkoxy, NHPO2R6, NHR9, NHSO2R8, NR6R7; R6, R7 = H,

C1-6 alkyl; R8 = H, C6-10 aryl, C1-4 alkyl; R9 = acyl, sulfonyl are prepd. These compds. are potent selective agonists of the EP4 subtype of prostaglandin E2 receptors. Also disclosed are their use for a medicament in the treatment of conditions which are related to elevated intraocular pressure in the eye of a patient by (1) treating ocular hypertension, glaucoma, macular edema, or macular degeneration, (2) increasing retinal and optic nerve head blood velocity, (3) increasing retinal and optic nerve tension, (4) providing a neuroprotective effect, or (5) treating eyes.

IT 670220-25-4P, Ethyl 7-[(4S)-2-oxo-4-[(1E)-3-oxo-4-phenylbut-1-enyl]-1,3-thiazolidin-3-yl]heptanoate 670220-26-5P, Ethyl 7-[(4S)-4-[(1E)-3-hydroxy-4-phenylbut-1-enyl]-2-oxo-1,3-thiazolidin-3-yl]heptanoate 670220-30-1P, 7-[(4S)-2-oxo-4-[(1E)-3-oxo-4-phenylbut-1-enyl]-1,3-thiazolidin-3-yl]heptanenitrile 670220-31-2P, 7-[(4S)-4-[(1E)-3-Hydroxy-4-phenylbut-1-enyl]-2-oxo-1,3-thiazolidin-3-yl]heptanenitrile
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (intermediate; preparation of oxazolidinone and thiazolidinone derivs. as

prostaglandin E2 receptor EP4-subtype agonists in treatment of conditions related to elevated intraocular pressure in eye)
RN 670220-25-4 CAPLUS
CN 3-Thiazolidineheptanoic acid, 2-oxo-4-[(1E)-3-oxo-4-phenyl-1-butenyl]-, ethyl ester, (4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 670220-26-5 CAPLUS
CN 3-Thiazolidineheptanoic acid, 4-[(1E)-3-hydroxy-4-phenyl-1-butenyl]-2-oxo-, ethyl ester, (4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

(1H-tetrazol-5-yl)hexyl]-1,3-thiazolidin-2-one 670219-10-0P,
4-[(1E)-4-Cyclohexyl-4,4-difluoro-3-hydroxybut-1-enyl]-3-[6-(1H-tetrazol-5-yl)hexyl]-1,3-thiazolidin-2-one 670219-11-1P,
4-[(1E)-4-Cyclohexyl-3-hydroxybut-1-enyl]-3-[6-(1H-tetrazol-5-yl)hexyl]-1,3-thiazolidin-2-one 670219-12-2P, 4-(4,4-Difluoro-3-oxo-4-phenylbutyl)-3-[6-(1H-tetrazol-5-yl)hexyl]-1,3-thiazolidin-2-one 670219-13-3P, 4-(3-Oxo-4-phenylbutyl)-3-[6-(1H-tetrazol-5-yl)hexyl]-1,3-thiazolidin-2-one 670219-16-6P,
4-[(1E)-4,4-Difluoro-3-hydroxy-4-phenylbut-1-enyl]-3-(7-hydroxy-6-oxoheptyl)-1,3-thiazolidin-2-one 670219-17-7P,

4-[(1E)-4,4-Difluoro-3-hydroxy-4-phenylbut-1-enyl]-3-[(2E)-6-(1H-tetrazol-5-yl)hex-2-enyl]-1,3-thiazolidin-2-one 670219-18-8P,

4-[(1E)-4,4-Difluoro-3-hydroxy-4-phenylbut-1-enyl]-3-[(3E)-6-(1H-tetrazol-5-yl)hex-3-enyl]-1,3-thiazolidin-2-one 670219-19-9P,

4-[(1E)-4,4-Difluoro-3-hydroxy-4-phenylbut-1-enyl]-3-[(4E)-6-(1H-tetrazol-5-yl)hex-4-enyl]-1,3-thiazolidin-2-one 670219-20-2P,

4-[(1E)-4,4-Difluoro-3-hydroxy-4-phenylbut-1-enyl]-3-[(2Z)-6-(1H-tetrazol-5-yl)hex-2-enyl]-1,3-thiazolidin-2-one 670219-21-3P,

4-[(1E)-4,4-Difluoro-3-hydroxy-4-phenylbut-1-enyl]-3-[(3Z)-6-(1H-tetrazol-5-yl)hex-3-enyl]-1,3-thiazolidin-2-one 670219-22-4P,

4-[(1E)-4,4-Difluoro-3-hydroxy-4-phenylbut-1-enyl]-3-[(4Z)-6-(1H-tetrazol-5-yl)hex-4-enyl]-1,3-thiazolidin-2-one 670219-23-5P,

4-[(1E)-4,4-Difluoro-3-hydroxy-4-phenylbut-1-enyl]-3-[6-(1H-tetrazol-5-yl)-4-hexyn-1-yl]-1,3-thiazolidin-2-one 670219-24-6P

670219-25-7P, 4-[(1E)-4,4-Difluoro-3-hydroxy-4-phenylbut-1-enyl]-3-[6-(1H-tetrazol-5-yl)-3-hexyn-1-yl]-1,3-thiazolidin-2-one

670219-26-8P, 5-[3-[4-[(1E)-4,4-Difluoro-3-hydroxy-4-phenylbut-1-enyl]-2-oxo-1,3-thiazolidin-3-yl]propyl]thiophene-2-carboxylic acid

670219-27-9P, 5-[3-[4-[(1E)-4,4-Difluoro-3-hydroxy-4-phenylbut-1-enyl]-2-oxo-1,3-thiazolidin-3-yl]propyl]-2-furoic acid

670219-28-0P, 4-[(1E)-4,4-Difluoro-3-hydroxy-4-phenylbut-1-enyl]-3-[3-(1H-tetrazol-5-yl)-2-furyl]propyl]-1,3-thiazolidin-2-one

670219-29-1P, 4-[(1E)-4,4-Difluoro-3-hydroxy-4-phenylbut-1-enyl]-3-[3-(1H-tetrazol-5-yl)thien-2-yl]propyl]-1,3-thiazolidin-2-one

670219-34-8P, 3-[3-[4-[(1E)-4,4-Difluoro-3-hydroxy-4-phenylbut-1-enyl]-2-oxo-1,3-thiazolidin-3-yl]propyl]benzoic acid 670219-36-0P,

2-[3-[4-[(1E)-4,4-Difluoro-3-hydroxy-4-phenylbut-1-enyl]-2-oxo-1,3-thiazolidin-3-yl]propyl]benzoic acid 670219-37-1P,

4-[(1E)-4,4-Difluoro-3-hydroxy-4-phenylbut-1-enyl]-3-[3-[3-(1H-tetrazol-5-yl)phenyl]propyl]-1,3-thiazolidin-2-one 670219-38-2P,

4-[(1E)-4,4-Difluoro-3-hydroxy-4-phenylbut-1-enyl]-3-[3-[2-(1H-tetrazol-5-yl)phenyl]propyl]-1,3-thiazolidin-2-one 670219-39-3P,

4-[(1E)-4,4-Difluoro-3-hydroxy-4-phenylbut-1-enyl]-3-[3-[4-(1H-tetrazol-5-yl)phenyl]propyl]-1,3-thiazolidin-2-one 670219-43-9P,

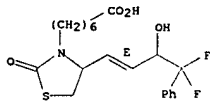
7-[4-[(1E)-4,4-Difluoro-3-hydroxy-4-phenylbut-1-enyl]-2-oxo-1,3-thiazolidin-3-yl]-2,2-difluoroheptanoic acid 670219-44-0P,

7-[4-[(1E)-4,4-Difluoro-3-hydroxy-4-phenylbut-1-enyl]-2-oxo-1,3-

L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 thiazolidin-3-yl]-4,4-difluoroheptanoic acid 670219-45-1P,
 7-[4-[(1E)-4,4-difluoro-3-hydroxy-4-phenylbut-1-enyl]-2-oxo-1,3-
 thiazolidin-3-yl]-5,5-difluoroheptanoic acid 670219-46-2P,
 7-[4-[(1E)-4,4-difluoro-3-hydroxy-4-phenylbut-1-enyl]-2-oxo-1,3-
 thiazolidin-3-yl]-6,6-difluoroheptanoic acid 670219-48-4P,
 3-[3-[4-[(1E)-4,4-difluoro-3-hydroxy-4-phenylbut-1-enyl]-2-oxo-1,3-
 thiazolidin-3-yl]propoxy]propanoic acid 670219-49-5P,
 4-[4-[(1E)-4,4-difluoro-3-hydroxy-4-phenylbut-1-enyl]-2-oxo-1,3-
 thiazolidin-3-yl]butoxy]acetic acid 670219-50-8P,
 {[4-[(1E)-4,4-difluoro-3-hydroxy-4-phenylbut-1-enyl]-2-oxo-1,3-
 thiazolidin-3-yl]butyl]thio]acetic acid 670219-51-9P,
 3-[[3-[4-[(1E)-4,4-difluoro-3-hydroxy-4-phenylbut-1-enyl]-2-oxo-1,3-
 thiazolidin-3-yl]propyl]thio]propanoic acid 670220-22-1P
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
 (Uses)
 (prepn. of oxazolidinone and thiazolidinone derivs. as prostaglandin

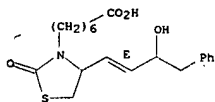
E2 receptor EP4-subtype agonists in treatment of conditions related to
 elevated intraocular pressure in eye)
 RN 670219-01-9 CAPLUS
 CN 3-Thiazolidineheptanoic acid, 4-[(1E)-4,4-difluoro-3-hydroxy-4-phenyl-1-
 butenyl]-2-oxo- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 670219-02-0 CAPLUS
 CN 3-Thiazolidineheptanoic acid,
 4-[(1E)-3-hydroxy-4-phenyl-1-butenyl]-2-oxo-
 (9CI) (CA INDEX NAME)

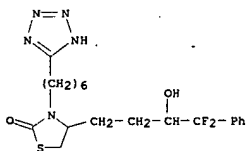
Double bond geometry as shown.



RN 670219-03-1 CAPLUS
 CN 2-Thiazolidinone,
 4-[(1E)-4,4-difluoro-3-hydroxy-4-phenyl-1-butenyl]-3-[6-
 (1H-tetrazol-5-yl)hexyl]- (9CI) (CA INDEX NAME)

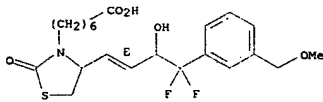
Double bond geometry as shown.

L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



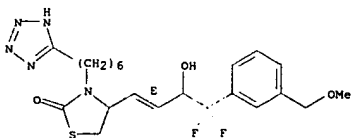
RN 670219-08-6 CAPLUS
 CN 3-Thiazolidineheptanoic acid, 4-[(1E)-4,4-difluoro-3-hydroxy-4-[3-
 (methoxymethyl)phenyl]-1-butenyl]-2-oxo- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 670219-09-7 CAPLUS
 CN 2-Thiazolidinone, 4-[(1E)-4,4-difluoro-3-hydroxy-4-[3-
 (methoxymethyl)phenyl]-1-butenyl]-3-[6-(1H-tetrazol-5-yl)hexyl]- (9CI)
 (CA INDEX NAME)

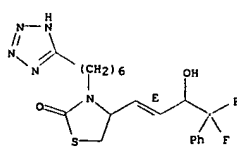
Double bond geometry as shown.



RN 670219-10-0 CAPLUS
 CN 2-Thiazolidinone,
 4-[(1E)-4-cyclohexyl-4,4-difluoro-3-hydroxy-1-butenyl]-3-
 [6-(1H-tetrazol-5-yl)hexyl]- (9CI) (CA INDEX NAME)

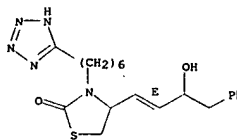
Double bond geometry as shown.

L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

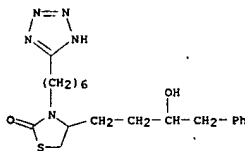


RN 670219-04-2 CAPLUS
 CN 2-Thiazolidinone,
 4-[(1E)-3-hydroxy-4-phenyl-1-butenyl]-3-[6-(1H-tetrazol-
 5-yl)hexyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

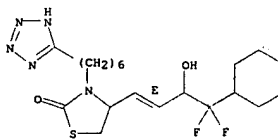


RN 670219-06-4 CAPLUS
 CN 2-Thiazolidinone, 4-[(3-hydroxy-4-phenylbutyl)-3-[6-(1H-tetrazol-5-
 yl)hexyl]- (9CI) (CA INDEX NAME)



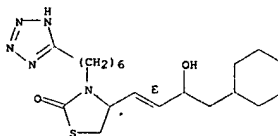
RN 670219-07-5 CAPLUS
 CN 2-Thiazolidinone, 4-[(4,4-difluoro-3-hydroxy-4-phenylbutyl)-3-[6-(1H-
 tetrazol-5-yl)hexyl]- (9CI) (CA INDEX NAME)

L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

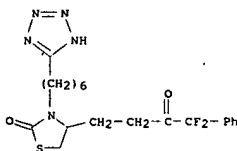


RN 670219-11-1 CAPLUS
 CN 2-Thiazolidinone, 4-[(1E)-4-cyclohexyl-4,4-difluoro-3-hydroxy-1-butenyl]-3-[6-(1H-
 tetrazol-5-yl)hexyl]- (9CI) (CA INDEX NAME)

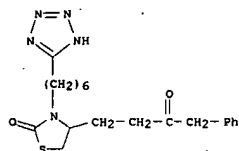
Double bond geometry as shown.



RN 670219-12-2 CAPLUS
 CN 2-Thiazolidinone,
 4-[(4,4-difluoro-3-oxo-4-phenylbutyl)-3-[6-(1H-tetrazol-5-
 yl)hexyl]- (9CI) (CA INDEX NAME)

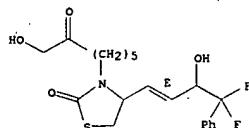


RN 670219-13-3 CAPLUS
 CN 2-Thiazolidinone, 4-[(3-oxo-4-phenylbutyl)-3-[6-(1H-tetrazol-5-yl)hexyl]-
 (9CI) (CA INDEX NAME)



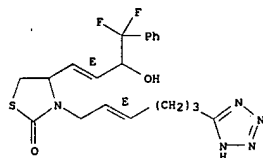
RN 670219-16-6 CAPLUS
CN 2-Thiazolidinone, 4-[(1E)-4,4-difluoro-3-hydroxy-4-phenyl-1-butenyl]-3-[(1E)-4,4-difluoro-3-hydroxy-6-oxoheptyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



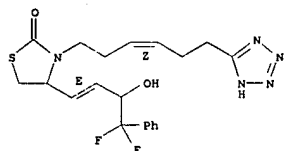
RN 670219-17-7 CAPLUS
CN 2-Thiazolidinone, 4-[(1E)-4,4-difluoro-3-hydroxy-4-phenyl-1-butenyl]-3-[(2E)-6-(1H-tetrazol-5-yl)-2-hexenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



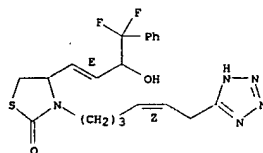
RN 670219-18-8 CAPLUS
CN 2-Thiazolidinone, 4-[(1E)-4,4-difluoro-3-hydroxy-4-phenyl-1-butenyl]-3-[(3E)-6-(1H-tetrazol-5-yl)-3-hexenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



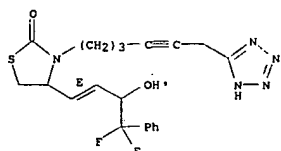
RN 670219-22-4 CAPLUS
CN 2-Thiazolidinone, 4-[(1E)-4,4-difluoro-3-hydroxy-4-phenyl-1-butenyl]-3-[(4Z)-6-(1H-tetrazol-5-yl)-4-hexenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



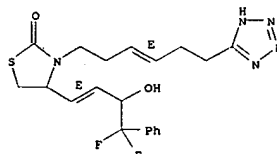
RN 670219-23-5 CAPLUS
CN 2-Thiazolidinone, 4-[(1E)-4,4-difluoro-3-hydroxy-4-phenyl-1-butenyl]-3-[6-(1H-tetrazol-5-yl)-2-oxo-3-thiazolidinylpropyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



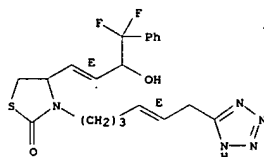
RN 670219-24-6 CAPLUS
CN 2-Thiazolidinone, 4-[(1E)-4,4-difluoro-3-hydroxy-4-phenyl-1-butenyl]-3-[6-(1H-tetrazol-5-yl)-2-oxo-3-thiazolidinylpropyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



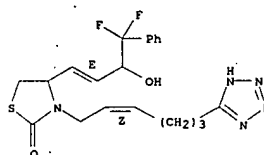
RN 670219-19-9 CAPLUS
CN 2-Thiazolidinone, 4-[(1E)-4,4-difluoro-3-hydroxy-4-phenyl-1-butenyl]-3-[(4E)-6-(1H-tetrazol-5-yl)-4-hexenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



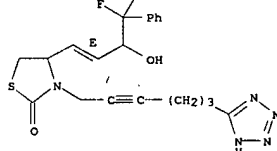
RN 670219-20-2 CAPLUS
CN 2-Thiazolidinone, 4-[(1E)-4,4-difluoro-3-hydroxy-4-phenyl-1-butenyl]-3-[(2Z)-6-(1H-tetrazol-5-yl)-2-hexenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



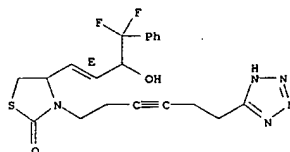
RN 670219-21-3 CAPLUS
CN 2-Thiazolidinone, 4-[(1E)-4,4-difluoro-3-hydroxy-4-phenyl-1-butenyl]-3-[(3Z)-6-(1H-tetrazol-5-yl)-3-hexenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



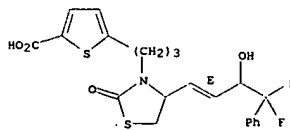
RN 670219-25-7 CAPLUS
CN 2-Thiazolidinone, 4-[(1E)-4,4-difluoro-3-hydroxy-4-phenyl-1-butenyl]-3-[6-(1H-tetrazol-5-yl)-2-oxo-3-thiazolidinylpropyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



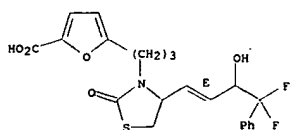
RN 670219-26-8 CAPLUS
CN 2-Thiophenecarboxylic acid, 5-[3-[4-[(1E)-4,4-difluoro-3-hydroxy-4-phenyl-1-butenyl]-2-oxo-3-thiazolidinylpropyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



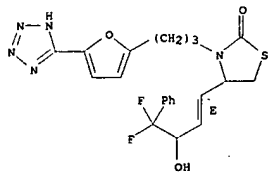
RN 670219-27-9 CAPLUS
CN 2-Furancarboxylic acid, 5-[3-[4-[(1E)-4,4-difluoro-3-hydroxy-4-phenyl-1-butenyl]-2-oxo-3-thiazolidinylpropyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



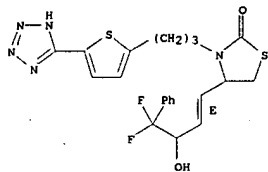
RN 670219-28-0 CAPLUS
CN 2-Thiazolidinone,
4-[(1E)-4,4-difluoro-3-hydroxy-4-phenyl-1-butenyl]-3-[3-
[(1H-tetrazol-5-yl)-2-furanyl]propyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



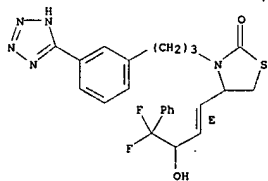
RN 670219-29-1 CAPLUS
CN 2-Thiazolidinone,
4-[(1E)-4,4-difluoro-3-hydroxy-4-phenyl-1-butenyl]-3-[3-
[(1H-tetrazol-5-yl)-2-thienyl]propyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



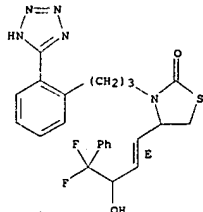
RN 670219-34-8 CAPLUS
CN Benzoic acid, 3-[3-[4-[(1E)-4,4-difluoro-3-hydroxy-4-phenyl-1-butenyl]-2-oxo-3-thiazolidinyl]propyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



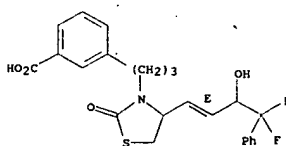
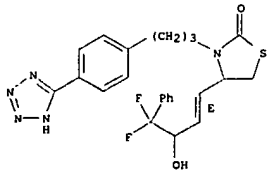
RN 670219-38-2 CAPLUS
CN 2-Thiazolidinone,
4-[(1E)-4,4-difluoro-3-hydroxy-4-phenyl-1-butenyl]-3-[3-
[(1H-tetrazol-5-yl)phenyl]propyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



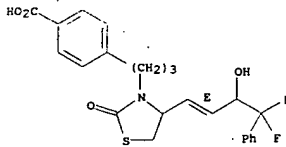
RN 670219-39-3 CAPLUS
CN 2-Thiazolidinone,
4-[(1E)-4,4-difluoro-3-hydroxy-4-phenyl-1-butenyl]-3-[3-
[(1H-tetrazol-5-yl)phenyl]propyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



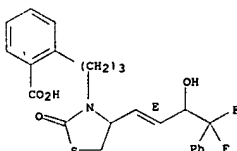
RN 670219-35-9 CAPLUS
CN Benzoic acid, 4-[3-[4-[(1E)-4,4-difluoro-3-hydroxy-4-phenyl-1-butenyl]-2-oxo-3-thiazolidinyl]propyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 670219-36-0 CAPLUS
CN Benzoic acid, 2-[3-[4-[(1E)-4,4-difluoro-3-hydroxy-4-phenyl-1-butenyl]-2-oxo-3-thiazolidinyl]propyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



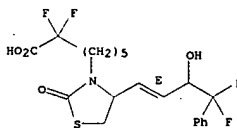
RN 670219-37-1 CAPLUS
CN 2-Thiazolidinone,
4-[(1E)-4,4-difluoro-3-hydroxy-4-phenyl-1-butenyl]-3-[3-
[(1H-tetrazol-5-yl)phenyl]propyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



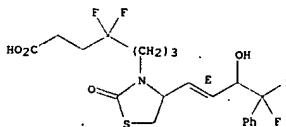
RN 670219-43-9 CAPLUS
CN 3-Thiazolidineheptanoic acid, 4-[(1E)-4,4-difluoro-3-hydroxy-4-phenyl-1-butenyl]-α,α-difluoro-2-oxo- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



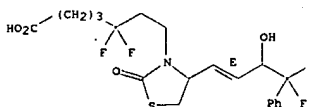
RN 670219-44-0 CAPLUS
CN 3-Thiazolidineheptanoic acid, 4-[(1E)-4,4-difluoro-3-hydroxy-4-phenyl-1-butenyl]-γ,γ-difluoro-2-oxo- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



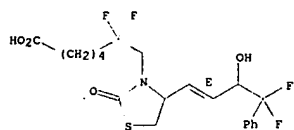
RN 670219-45-1 CAPLUS
CN 3-Thiazolidineheptanoic acid, 4-[(1E)-4,4-difluoro-3-hydroxy-4-phenyl-1-butenyl]-δ,δ-difluoro-2-oxo- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



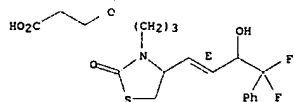
RN 670219-46-2 CAPLUS
CN 3-Thiazolidineheptanoic acid, 4-[(1E)-4,4-difluoro-3-hydroxy-4-phenyl-1-butenyl]-ε,ε-difluoro-2-oxo- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



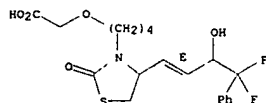
RN 670219-48-4 CAPLUS
CN Propanoic acid,
3-[[3-[[4-[(1E)-4,4-difluoro-3-hydroxy-4-phenyl-1-butenyl]-2-oxo-3-thiazolidinyl]propoxy]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



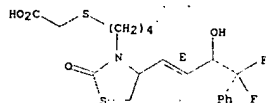
RN 670219-49-5 CAPLUS
CN Acetic acid,
[4-[[4-[(1E)-4,4-difluoro-3-hydroxy-4-phenyl-1-butenyl]-2-oxo-3-thiazolidinyl]butoxy]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



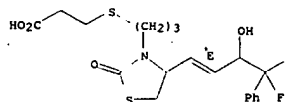
RN 670219-50-8 CAPLUS
CN Acetic acid,
[[4-[[4-[(1E)-4,4-difluoro-3-hydroxy-4-phenyl-1-butenyl]-2-oxo-3-thiazolidinyl]butylthio]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



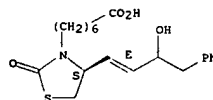
RN 670219-51-9 CAPLUS
CN Propanoic acid,
3-[[3-[[4-[(1E)-4,4-difluoro-3-hydroxy-4-phenyl-1-butenyl]-2-oxo-3-thiazolidinyl]propylthio]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



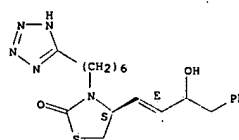
RN 670220-22-1 CAPLUS
CN 3-Thiazolidineheptanoic acid,
4-[(1E)-3-hydroxy-4-phenyl-1-butenyl]-2-oxo-
(4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 670220-27-6 CAPLUS
CN 2-Thiazolidinone,
4-[(1E)-3-hydroxy-4-phenyl-1-butenyl]-3-[6-(1H-tetrazol-5-yl)hexyl]-, (4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



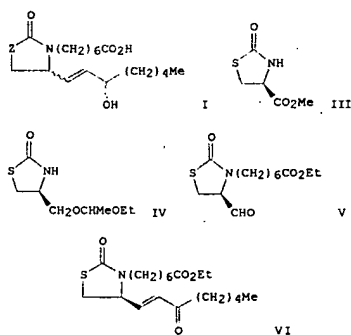
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RECORD.

ACCESSION NUMBER: 1984:103049 CAPLUS
DOCUMENT NUMBER: 100:103049
TITLE: Prostaglandin derivatives
PATENT ASSIGNEE(S): Chugai Pharmaceutical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 58150575	A2	19830907	JP 1982-32987	19820304
			JP 1982-32987	19820304

PRIORITY APPLN. INFO.:

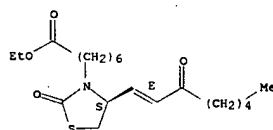
GI



AB Prostaglandin derivs. I (Z = O, S) were prepared starting with HZCH₂CH(NH₂)CO₂Et (II) in 7-9 steps. Thus, cyclization of D-II (Z = S) with COCl₂ gave III, which was reduced and treated with H₂C=CHOEt to give IV. Condensation of IV with I(CH₂)₆CO₂Et followed by deprotection and oxidation gave V. Wittig reaction of V with (MeO)ZP(O)CH₂CO₂SH₁₁, reduction of the resulting VI, and hydrolysis gave (12S,15S)-(-)-I and (12S,15R)-(+)-I (Z = S).
IT 82430-19-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and hydrolysis of)
RN 82430-19-1 CAPLUS

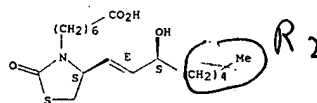
CN 3-Thiazolidineheptanoic acid, 2-oxo-4-(3-oxo-1-octenyl)-, ethyl ester, [S-(E)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



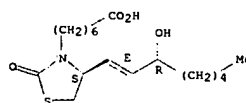
IT 82430-23-7P 82430-24-8P 82430-25-9P
82430-26-0P
RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
RN 82430-23-7 CAPLUS
CN 3-Thiazolidineheptanoic acid, 4-(3-hydroxy-1-octenyl)-2-oxo-, [S-(R*,R*-(E))] (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 82430-24-8 CAPLUS
CN 3-Thiazolidineheptanoic acid, 4-(3-hydroxy-1-octenyl)-2-oxo-, [R-(R*,S*-(E))] (9CI) (CA INDEX NAME)

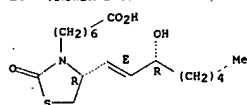
Absolute stereochemistry.
Double bond geometry as shown.



RN 82430-25-9 CAPLUS
CN 3-Thiazolidineheptanoic acid, 4-(3-hydroxy-1-octenyl)-2-oxo-, [R-(R*,R*-(E))] (9CI) (CA INDEX NAME)

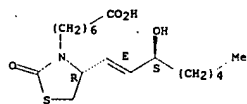
Absolute stereochemistry.
Double bond geometry as shown.

L4 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



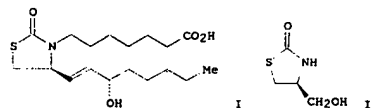
RN 82430-26-0 CAPLUS
CN 3-Thiazolidineheptanoic acid, 4-[(3-hydroxy-1-octenyl)-2-oxo-, [S-(R*,S*-(E))]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



L4 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN

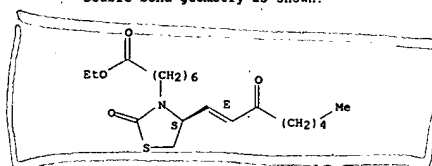
ACCESSION NUMBER: 1982:45523 CAPLUS
DOCUMENT NUMBER: 97:55523
TITLE: Synthesis of both enantiomers of 8-aza-11-deoxy-10-thiaprostaglandin E1
AUTHOR(S): Kubodera, Noboru; Nagano, Hiroyuki; Takagi, Michiro; Matsunaga, Isao
CORPORATE SOURCE: New Drug Res. Lab., Chugai Pharm. Co., Ltd., Tokyo, 171, Japan
SOURCE: Heterocycles (1982), 18(Spec. Issue), 259-63
DOCUMENT TYPE: CODEN: HETCYAM; ISSN: 0385-5414
LANGUAGE: Journal
GI: English



AB I and its 15β epimer were prepad. from D-cysteine via cyclization of the Et ester-HCl with COCl2, reduction with NaBH4 to give (S)-II, and conventional alkylation, etc. The enantiomers of I and 15β-I were similarly prepared from L-cysteine.

IT 82430-19-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and borohydride reduction of)
RN 82430-19-1 CAPLUS
CN 3-Thiazolidineheptanoic acid, 2-oxo-4-[(3-oxo-1-octenyl)-, ethyl ester, [S-(E)]- (9CI) (CA INDEX NAME)

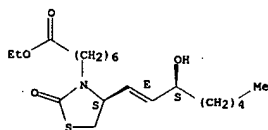
Absolute stereochemistry.
Double bond geometry as shown.



IT 82430-20-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and conformation and configuration of)
RN 82430-20-4 CAPLUS
CN 3-Thiazolidineheptanoic acid, 4-[(3-hydroxy-1-octenyl)-2-oxo-, ethyl ester, [S-(R*,R*-(E))]]- (9CI) (CA INDEX NAME)

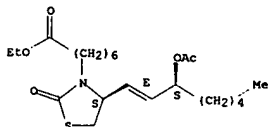
Absolute stereochemistry.

L4 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
Double bond geometry as shown.



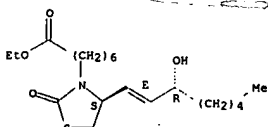
IT 82430-22-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and ozonolysis of)
RN 82430-22-6 CAPLUS
CN 3-Thiazolidineheptanoic acid, 4-[(3-acetyloxy-1-octenyl)-2-oxo-, ethyl ester, [S-(R*,R*-(E))]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



IT 82430-21-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and saponification of)
RN 82430-21-5 CAPLUS
CN 3-Thiazolidineheptanoic acid, 4-[(3-hydroxy-1-octenyl)-2-oxo-, ethyl ester, [R-(R*,S*-(E))]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

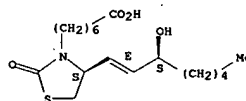


IT 82430-23-7P 82430-24-8P 82430-25-9P
82430-26-0P

L4 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(synthesis of, from cysteine)

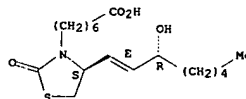
RN 82430-23-7 CAPLUS
CN 3-Thiazolidineheptanoic acid, 4-[(3-hydroxy-1-octenyl)-2-oxo-, [R-(R*,S*-(E))]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



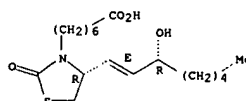
RN 82430-24-8 CAPLUS
CN 3-Thiazolidineheptanoic acid, 4-[(3-hydroxy-1-octenyl)-2-oxo-, [R-(R*,S*-(E))]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 82430-25-9 CAPLUS
CN 3-Thiazolidineheptanoic acid, 4-[(3-hydroxy-1-octenyl)-2-oxo-, [R-(R*,S*-(E))]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 82430-26-0 CAPLUS
CN 3-Thiazolidineheptanoic acid, 4-[(3-hydroxy-1-octenyl)-2-oxo-, [S-(R*,S*-(E))]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

